

# ecology and environment, inc.

International Specialists in the Environment

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March 28, 2005

United States Environmental Protection Agency Emergency Response Office 75 Hawthorne Street San Francisco, California 94105 TDD: 09-04-12-0030 Project: 0534.01RO

Attention:

Janet Yocum, Federal On-Scene Coordinator

Subject:

Closure Report for Advanced Fuels Emergency Oil Spill

Corona, Riverside County, California

Latitude: 33° 52' 15.6" North, Longitude: 117° 32' 6.0" West

#### INTRODUCTION

On January 5, 2005, United States Environmental Protection Agency (USEPA) federal On-Scene Coordinator (FOSC) R. Wise directed Ecology and Environment, Inc.'s Superfund Technical Assessment and Response Team to respond to a petroleum fuel spill located at Advanced Fuel Filtration Systems, Inc. (AFF), 1451 Magnolia Avenue, Corona, Riverside County, California (the site). The spill had occurred on or about January 3, 2005, and had been referred to FOSC Wise by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC). The site property is owned by Corona Services Park, which had leased the site to AFF, a company which was reportedly undergoing bankruptcy proceedings.

Initial response activities had been conducted by the Corona Fire Department (CFD) and Remedial Construction Services, L.P. (Recon), a company whose services were contracted for by Corona Services Park. USEPA and START involvement with the site entailed oversight of the initial on-site and off-site mitigation activities conducted by Recon, and subsequent oversight of on-site and off-site assessment sampling and remediation activities. FOSC Wise's involvement with the site was limited to the initial response. USEPA oversight activities were turned over to FOSCs H. Salter and, subsequently, J. Yocum for the remainder of the site stabilization process.

Recon has prepared a full report of their AFF site mitigation activities. Therefore, specific details of Recon's site assessment and cleanup will not be iterated in this report.

Hundreds of drums of product and hazardous wastes were discovered at the site in the course of the initial response activities. USEPA FOSC H. Salter was in ultimate control of the management and disposition of these drums. The drum investigation and removal was conducted under the USEPA's Southern California Enforcement technical direction document, and is described in a separate report.

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#### **BACKGROUND**

The petroleum fuel spill was caused by an unknown person or persons who opened valves on one or more tanker trucks staged at the site. The fuel, purported to be jet fuel and/or diesel, spilled onto the ground and traveled to the north onto neighboring properties and subsequently onto East Sixth Street. The volume of fuel spilled is unknown. Heavy rains which occurred during and after the spill aggravated the situation, allowing the fuel to spread for approximately 0.7 miles, to the intersection of E. Sixth Street and Radio Road (Figure 1, Site Location Map; Figure 2, Facility Map and Spill Route). Most of the ground surface at the site is covered by degraded asphalt. Properties to the north of the site which were impacted by the spill were, for the most part, unpaved. In addition, the spill impacted unpaved medians and shoulders along E. Sixth Street.

An odor complaint initially caused the Corona Fire Department (CFD) to respond to the incident. The CFD was able to back-track the spill to its source at the site, and began emergency containment and mitigation actions. Other local agencies became involved over the next 24 hours, including the County of Riverside, Environmental Health Department (CREHD), the Riverside County District Attorney's Office, DTSC, and the California Regional Water Quality Control Board (RWQCB).

On January 7, 2005, CREHD requested that the USEPA take control of the site investigation activities, via the submission of a Request for Federal Action.

#### SITE MITIGATION ACTIVITIES

The following activities were conducted with START oversight.

Beginning on January 5, 2005, Recon took measures to contain and mitigate the spill. The initial measures performed included spill containment, the pumping of spilled fuel and rainwater into onsite tanks, and the removal of visually-impacted soils from both on-site and off-site locations. Excavated soils and pumped wastewater were stored at the site, and subsequently analyzed for the presence of:

- CAM Metals by USEPA Method 6010/7000 series;
- Volatile organic compounds (VOCs) by USEPA Method 8260B;
- Semi-volatile organic compounds by USEPA Method 8270C;
- Polychlorinated biphenyls by USEPA Method 8082; and
- ► Total petroleum hydrocarbons (TPH) by modified USEPA Method 8015.

Results of the stored soils and waters indicated that the main contaminant of concern was TPH, found to contain hydrocarbons mainly in the gasoline and kerosene carbon-chain range.

On January 13, 2005 Recon submitted a Preliminary Site Assessment Plan to the USEPA, for the assessment of on- and off-site impacted soils. The Preliminary Site Assessment Plan addressed the collection of background samples and suspected spill-impacted soils. A revised version of the Preliminary Site Assessment Plan was submitted on January 17, 2005 after incorporation of USEPA-

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required amendments. The Preliminary Site Assessment Plan called for the analysis of the soil samples for the parameters TPH, VOCs, and SVOCs by the methods described above.

Over the following weeks, Recon implemented the Preliminary Site Assessment Plan, conducting a grid-driven surface and subsurface sampling program to assess the extent of the remaining spill-caused contamination. For the purposes of the cleanup, an action level of 1,000 milligrams per kilogram (mg/Kg) of TPH was established through a consensus of the USEPA and the RWQCB.

Upon receipt of sampling results from Recon's soil assessment activities, several areas, both on- and off-site, were found to exceed the 1,000 mg/Kg TPH action level. In early February 2005, Recon excavated and collected confirmation samples in these areas. All areas were found to meet the cleanup action level for TPH after the second round of sampling.

#### CONCLUSION

On or about January 3, 2005, a petroleum fuel spill occurred at the subject site, and flowed onto neighboring properties and streets. The spread of contamination was exacerbated by heavy rains. With USEPA and START oversight, a contractor for the site property owner conducted initial stabilization and removal activities, and subsequently conducted further assessment and removal activities, both on-site and off-site, which culminated in confirmation sampling which met the USEPA- and RWQCB-promulgated remediation goal.

This letter report represents the final deliverable for the Advanced Fuels Emergency Oil Spill. If you have any questions or comments regarding this report, please contact this office.

Respectfully submitted,

Michael Schwennesen
START Project Manager

cc: Electronic Deliverable Systems 2

START Project File

ATTACHMENTS A Figures

B Photodocumentation

# ATTACHMENT A

# **Figures**





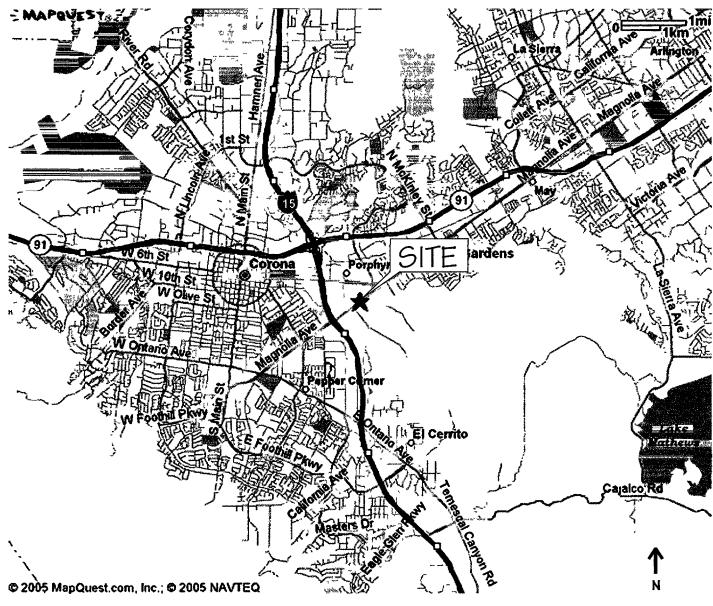


Figure 1: Site Location Map Advanced Fuel Filtration Systems 1451 Magnolia Avenue Corona, Riverside County, California

Ste

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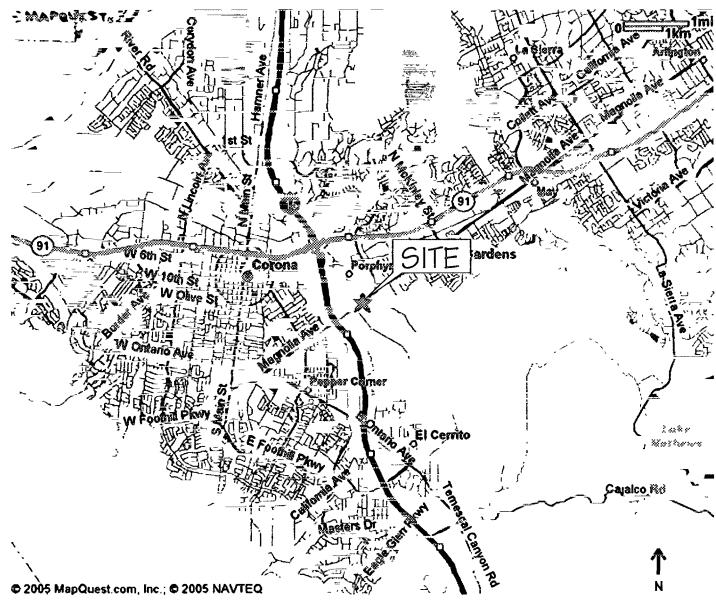
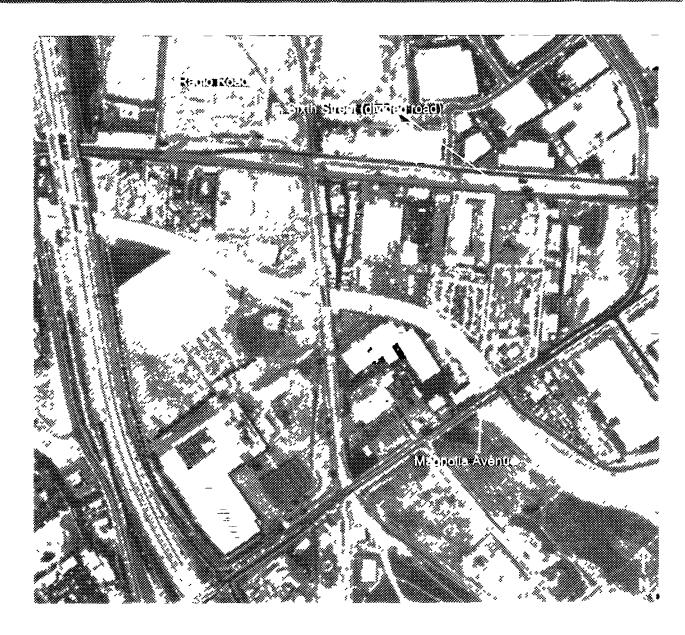


Figure 1: Site Location Map Advanced Fuel Filtration Systems 1451 Magnolia Avenue Corona, Riverside County, California

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Source: 2002 aerial photograph. Some on- and off-site features have changed

Figure 2: Facility Map and Spill Route Advanced Fuel Filtration Systems 1451 Magnolia Avenue Corona, Riverside County, California

TDD: 09-04-12-0030 Job: 0534.01R0 Approximate Site Boundary



General Direction of Petroleum Spill Flow



Approximate Location of Spill

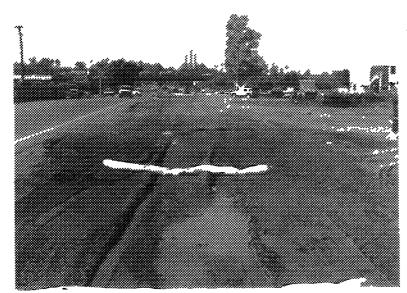
# ATTACHMENT B

# **Photodocumentation**



## Advanced Fuels Emergency Oil Spill

Corona, Riverside County, California



#### **PHOTO 1**

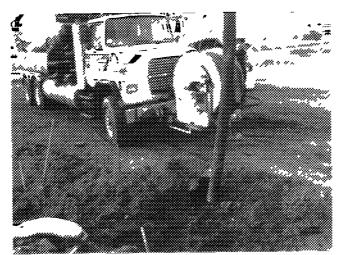
Date: 01/06/05

Direction: West

Photographer: M. Schwennesen

Description: Median of E. Sixth Street,

with absorbent boom in place.



### **PHOTO 2**

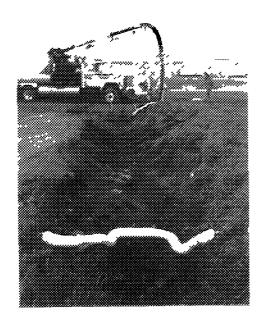
Date: 01/06/05

**Direction**: Northwest

Photographer: M. Schwennesen

**Description**: Vacuum truck being used to remove petroleum-tainted liquids from

culvert in E. Sixth Street median.



#### <u>**PHOTO 3**</u>

Date: 01/06/05

Direction: North

Photographer: M. Schwennesen

**Description**: Petroleum-contaminated open ditch on median of E. Sixth Street.

# Advanced Fuels Emergency Oil Spill

Corona, Riverside County, California



### **PHOTO 4**

Date: 01/07/05

Direction: North

Photographer: M. Schwennesen

**Description**: Same as Photo 3, after

more rain overnight.



## **PHOTO 5**

Date: 01/07/05

**Direction**: Northwest

Photographer: M. Schwennesen

**Description**: Sandbags and booms used to contain spill on the site property.



### PHOTO 6

Date: 01/18/05

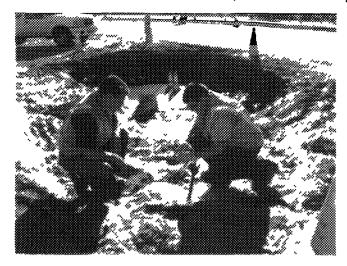
Direction: North

Photographer: T. Woolslayer

**Description**: Soil sampling by Recon

personnel, for the off-site soil contamination assessment.

### Advanced Fuels Emergency Oil Spill Corona, Riverside County, California



### **PHOTO 7**

Date: 01/19/05

**Direction**: Southeast

Photographer: M. Schwennesen

Description: Recon collecting soil

sample.



### **PHOTO 8**

Date: 01/28/05

**Direction**: North

Photographer: M. Schwennesen

**Description**: "Pothole" sampling locations on the site property.



### PHOTO 9

Date: 02/28/05

**Direction**: Northwest

Photographer: M. Schwennesen

**Description**: AFF site after all remediation activities completed.